

PROJECT DESCRIPTION

GENERAL
THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL

AT THE INTERSECTION OF MD 177 (MOUNTAIN ROAD) AND SOUTH CAROLINA AVENUE IN ANNE ARUNDEL COUNTY. MD 177 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL TRAFFIC ACTUATED MODE.

CONTROLLER REQUIREMENTS

INSTALL A NEMA SIZE "6" BASE MOUNTED CABINET. THE SHA SIGNAL SHOP WILL SUPPLY A NEMA EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER WITH ASSOCIATED HARNESSSES, ONE (1) 4 CHANNEL DETECTOR AMPLIFIER, AND ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT. 1-4 CAMERAS WITHIN THE CABINET.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO NOTIFY MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Mr. Greg Welker
District Engineer
Phone: 410-841-1001

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1019

Mr. Joe Harty
District Utility Engineer
Phone: 410-841-1005

Mr. James Folden
Assistant District Engineer - Construction
Phone: 410-841-1031

Mr. John Mays
Assistant District Engineer - Maintenance
Phone: 410-841-1013

Mr. Ronald Hopkins
Resident Maintenance Engineer
Phone: 410-766-3770

THE CONTACT PERSONS FOR THE OFFICE OF TRAFFIC AND SAFETY ARE AS FOLLOWS:

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
Phone: 410-787-7630

Mr. Edward Rodehizer
Team Leader, Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader, Sign Operations
Phone: 410-787-7670

Ms. Darlene Eide
Supply Officer IV (Signal Shop Warehouse)

The Power Company Representative is:
BGE Company
7317 Parkway Drive South
Hanover, Md 21076
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT; 1-4 CAMERAS
9570	74 SF	[UPDATED] SHEET ALUMINUM SIGNS GROUND MOUNTED 2-EA W3-3 (36 IN. x 36 IN.) 2-EA D95-25 (24 IN. x 24 IN.) 1-EA SHIELD ASSEMBLY (30 IN. x 51 IN.) "EAST, MD 177, RIGHT ARROW" 1-EA SHIELD ASSEMBLY (48 IN. x 75 IN.) "WEST, MD 177, LEFT ARROW" 2-EA D-3(2) (72 IN. x 12 IN.) F.Y. "S. Carolina Ave"
9571	11 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 1 EA D-3(2) (96 IN. x 16 IN.) "S. CAROLINA AVE." DUAL FACED

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO. QUANTITY DESCRIPTION

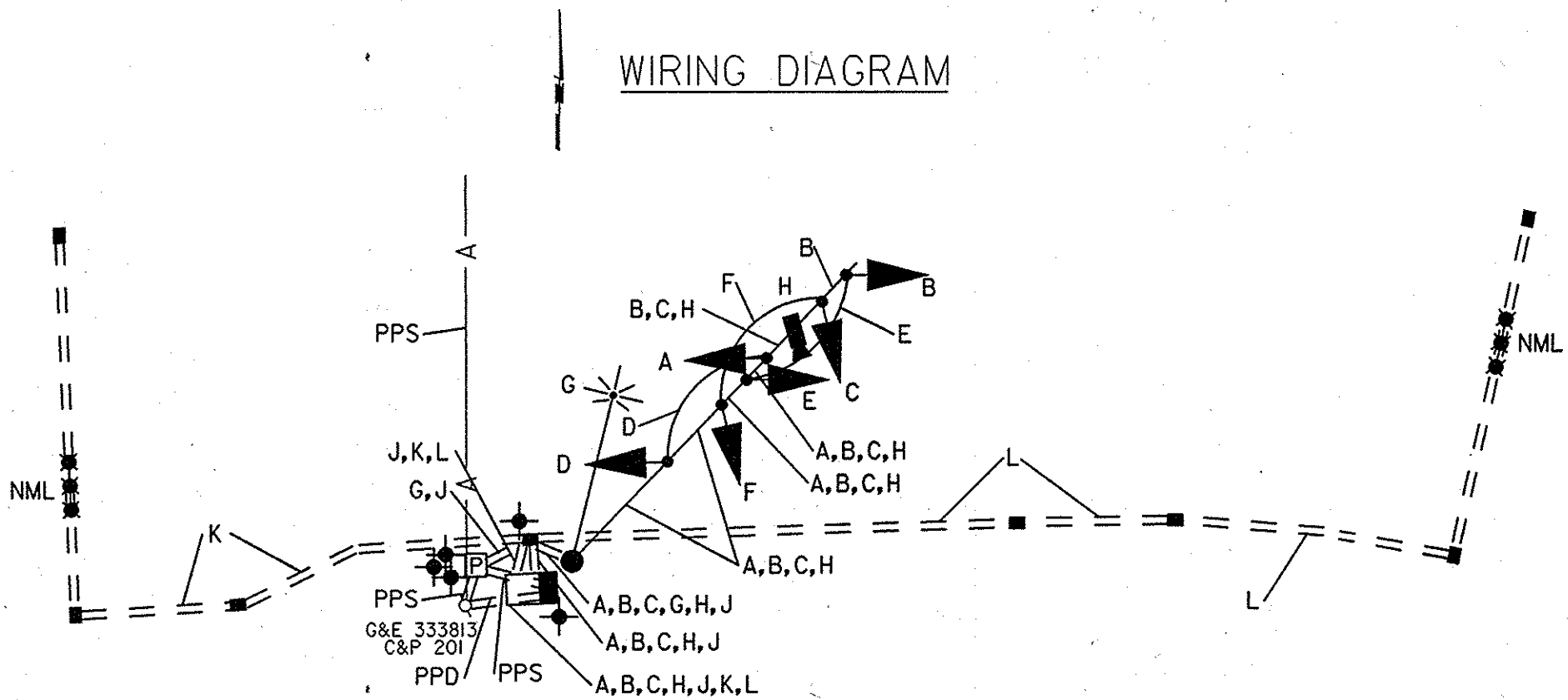
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	1 CY	TEST PIT EXCAVATION
5001	64 LF	5 IN. HEAT APPLIED WHITE OR YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5002	50 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	45 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	18 EA	12 IN. LED SIGNAL HEAD SECTION
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE
8019	1 EA	MAST ARM POLE AND 50 FT. MAST ARM ANY "T" DIMENSION
8021	2 EA	NON INVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT.
8026	1 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT.
8035	725 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	235 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8037	90 LF	WOOD SIGN SUPPORT UP TO 4 x 6
8039	85 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8041	30 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8045	120 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8047	8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	60 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	275 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	80 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNTED

WIRING DIAGRAM



A
B
C
ELECTRICAL CABLE -
7 CONDUCTOR (NO. 14 AWG)

D
E
F
ELECTRICAL CABLE -
5 CONDUCTOR (NO. 14 AWG)

G
ELECTRICAL CABLE -
2 CONDUCTOR (NO. 14 AWG) TC

H
CONTROL CABLE, 250 FT. VIDEO DETECTION
CAMERA TO CONTROLLER

J
NO. 6 AWG STRANDED BARE
COPPER GROUND WIRE

K
L
NON INVASIVE MICROLOOP DETECTOR
LEAD IN CABLE - 1000 FT.

NML
NON INVASIVE MICROLOOP PROBE SET

PPS
PROPOSED UNDERGROUND POWER SERVICE
(ELECTRICAL CABLE - 1-CONDUCTOR
NO. 4 AWG-THHN/THWN) 3-30' COILS OF SLACK
AT BASE OF UTILITY POLE FOR USE BY OTHERS

PPD
PROPOSED UNDERGROUND TELEPHONE
SERVICE TO BE INSTALLED BY OTHERS

PROPOSED GROUND ROD - 3/4 INCH
DIAMETER X 10 FOOT LENGTH.

PHASE CHART

	1	2	3	4	5	6	
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	
PHASE 2 AND 6	G	G	G	G	R	R	←
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	R	R	→
PHASE 4	R	R	R	R	G	G	↑
PHASE 4 CHANGE	R	R	R	R	Y	Y	↓
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↔

TOD NO:AT915-34
SHA NO:AA487A5C/BSC
MD177@ SOUTH CAROLINA
AVE



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 177 (MOUNTAIN ROAD)
AT SOUTH CAROLINA AVENUE

GENERAL INFORMATION

SCALE NONE ADVERTISED DATE 1-25-2008 CONTRACT NO. AT915S185

DESIGNED BY MCG COUNTY ANNE ARUNDEL

DRAWN BY AMT LOGMILE 02017706.90

CHECKED BY BAB TMS NO. I-493

F.A.P. NO. TOD NO.

TS NO. 4637-GI DRAWING SG-02 OF 02 SHEET NO. 2 OF 2

PLOTTED: Monday, February 04, 2008 AT 08:39 AM
FILE: I:\PROJECTS\0312513\0312513_0074\Drawings\TRAFFIC\SG-N001_MD177.dgn

BY: thompson



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